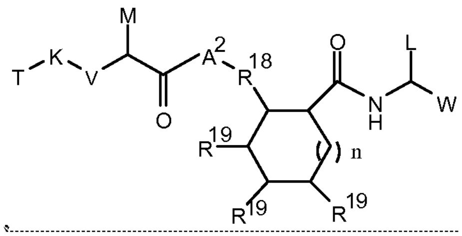
AMENDMENTS TO THE CLAIMS

Please amend Claims 1, 2, 9, 11, 13, 14, 16, 21, 22, 27, and 38. Please cancel Claims 4-5, 10, and 12. Please add new Claim 38. The Claim listing below will replace all prior versions of the Claims in the application.

Claim Listing

1. (Currently amended) A compound of the formula (I):



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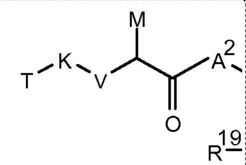
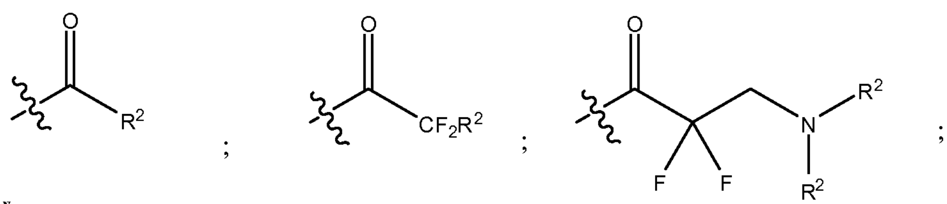


wherein:

W is:



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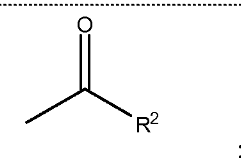

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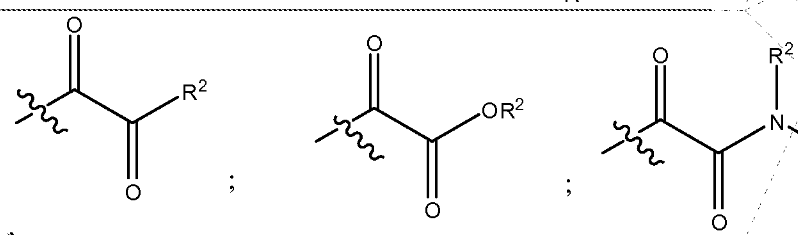

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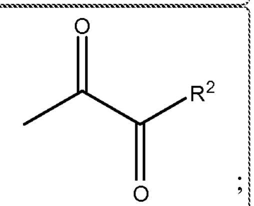

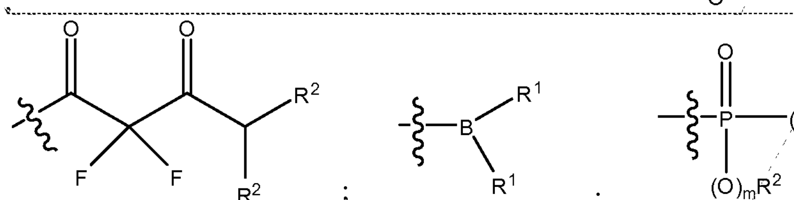

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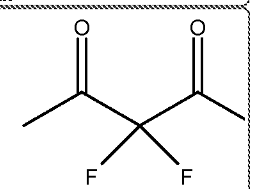

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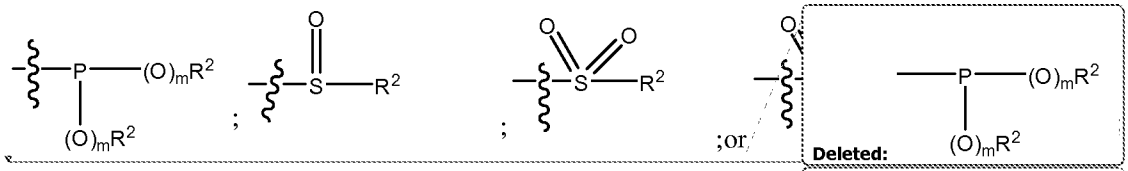

wherein:

m is 0 or 1;

each R^1 is hydroxy, alkoxy, or aryloxy, or each R^1 is an oxygen atom and together with the boron, to which they are each bound, form a 5-7 membered ring, wherein the ring atoms are carbon, nitrogen or oxygen;

each R^2 is independently selected from -H, fluorine, trifluoromethyl, alkyl, aryl, aralkyl, heteroaralkyl, heterocyclyl, or heterocyclylalkyl; or two R^2 groups, which are bound to the same nitrogen atom, form together with that nitrogen atom, a 5-7 membered monocyclic heterocyclic ring system; wherein any R^2 carbon atom is optionally substituted with J;

J is selected from t-butyl, methyl, trifluoromethyl, hydroxy, methoxy, ethoxy, trifluoromethoxy, carboxy, phenyl, benzyl, phenoxy, benzyloxy, fluoro, chloro, bromo, isoxazolyl, pyridinyl, piperidinyl, carboxymethyl, carboxyethyl, dialkylamino, morpholinylmethyl, phenylacetylamino, or acylamino wherein each J is optionally substituted with 1-3 J^1 groups; and

J^1 is alkyl, aryl, aralkyl, alkoxy, aryloxy, heterocyclyl, heterocyclyloxy, keto, hydroxy, amino, alkanoylamino, aroylamino, carboxy, carboxyalkyl, carboxamidoalkyl, halo, cyano, nitro, formyl, sulfonyl, or sulfonamido;

L is alkyl, alkenyl, or alkynyl, wherein any hydrogen is optionally replaced with halogen, and wherein any hydrogen or halogen atom bound to any terminal carbon atom is optionally replaced with sulfhydryl or hydroxy;

each M is independently selected from isopropyl, propyl, methyl, pyridylmethyl, benzyl, naphthylmethyl, phenyl, imidazolylmethyl, thiophenylmethyl, cyclohexylmethyl, phenethyl, benzylthiomethyl, or benzyloxyethyl;

R^{18} is a bond, $-N(R^{11})-$ or $-C(O)-$;

R^{11} is hydrogen or C1-C3 alkyl;

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each R^{19} is independently -H or -R^{21}-aryl, or 2 adjacent R^{19} may be bound to one another to form a 5-7 membered aromatic ring; wherein any R^{19} is optionally substituted with 1 to 4 independently selected [[J']] groups;

each R^{21} is independently C1-C3-straight or branched alkyl, C2-C3-straight or branched alkenyl, O-(C1-C3)-straight or branched alkyl, or O-(C2-C3)-straight or branched alkenyl;

n is 0 or 1;

the ring to which R^{18} and R^{19} are attached may be saturated, partially saturated, aromatic or fully unsaturated; and 1 to 3 carbon atoms that make up the ring to which R^{18} and R^{19} are attached are optionally replaced with a heteroatom which is independently selected from O, S, S(O), $S(O)_2$, or $N(R^{11})$;

A^2 is a bond or $–N(R^{11})-R^{17}(M)-R^{22}$-, wherein

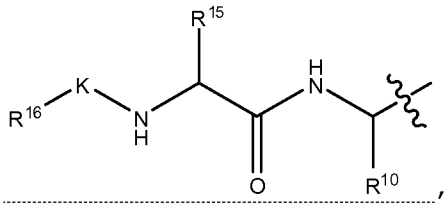
R^{17} is –CH or –N-; and

R^{22} is –C(O)- or $–S(O)_2$-;

V is a bond, $-CH(R^{11})$, -O-, -S- or $–N(R^{11})$-;

K is a bond, -O-, -S-, -C(O)-, -S(O)-, $-S(O)_2$, or $–S(O)NR^{11}$-; and

T is $–R^{12}$, -alkyl-R^{12}, -alkenyl-R^{12}, -alkynyl-R^{12}, $-OR^{12}$, $-N(R^{12})_2$, $-C(O)R^{12}$, $-C(=NO\text{-alkyl})R^{12}$ or



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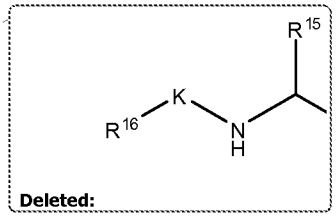


wherein:

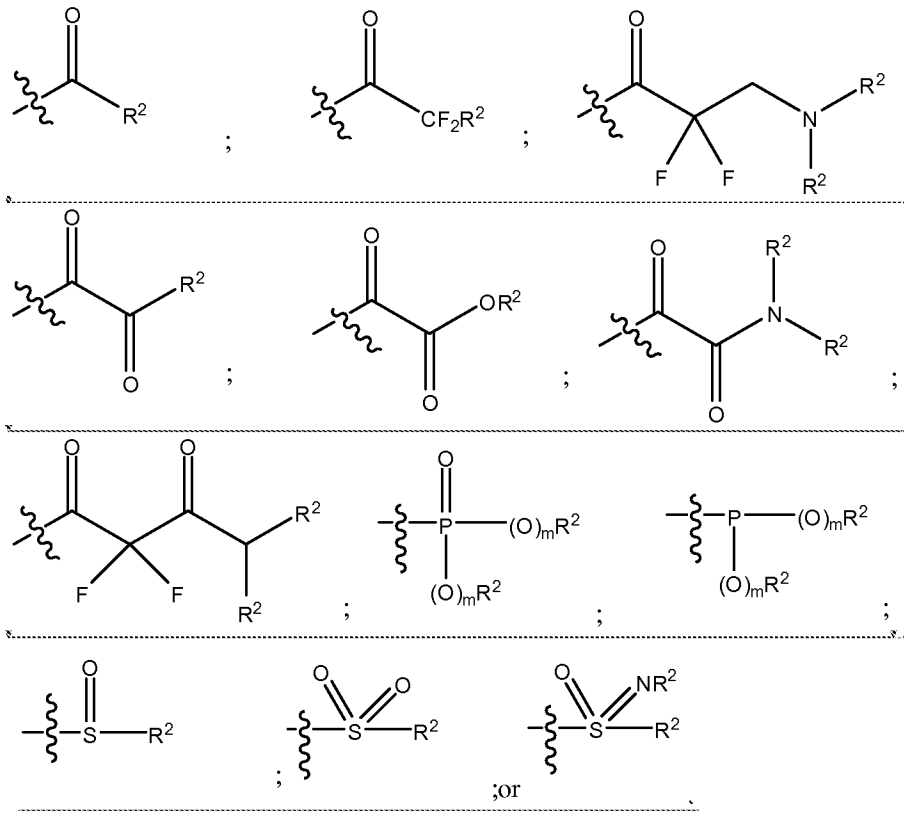
each R^{12} is independently selected from hydrogen, aryl, heteroaryl, cycloalkyl, heterocyclyl, cycloalkylidenyl, or heterocycloalkylidenyl, and is optionally substituted with 1 to 3 J groups; or a first R^{12} and a second R^{12}, together with the nitrogen to which they are bound, form a mono- or bicyclic ring system optionally substituted with 1 to 3 J groups;

R^{10} is alkyl, cycloalkyl, aryl, aralkyl, heterocyclyl, heterocyclylalkyl, heteroaryl, heteroaralkyl, carboxyalkyl, or carboxaminoalkyl, and is optionally substituted with 1 to 3 J groups;

R^{15} is alkyl, cycloalkyl, aryl, aralkyl, heterocyclyl, heterocyclylalkyl, heteroaryl, heteroaralkyl, carboxyalkyl, or carboxaminoalkyl, and is optionally substituted with 1 to 3 J groups; and

R^{16} is hydrogen, alkyl, aryl, heteroaryl, cycloalkyl, or heterocyclyl.

2. (Currently amended) The compound according to claim 1, wherein W is selected from:



3. (Original) The compound according to claim 2, wherein W is –C(O)H.

4.-5. (Canceled)

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6. (Original) The compound according to claim 1, wherein each J^1 is independently selected from alkoxy, alkyl, halo or aryl.

7. (Original)The compound according to claim 6, wherein each J^1 is independently selected from C1-3 alkoxy, chloro, C1-3 alkyl, or phenyl.

8. (Original) The compound according to claim 1, wherein L is selected from trihalomethyl or alkyl substituted with trihalomethyl, sulfhydryl, or alkyl substituted with trihalomethyl, sulfhydryl or hydroxy.

9. (Currently amended) The compound according to claim [[8]]1, wherein L is $-CH_2CH_3$ or $-CH_2CF_3$.

10. (canceled)

11. (Currently amended) The compound according to claim 1, wherein each R^2 is H.

12. (canceled)

13. (Currently amended) The compound according to claim [[12]]1, wherein each M is isopropyl.

14. (Currently amended) The compound according to claim 1, wherein one R^{19} is $-R^{21}$-aryl and the other two R^{19} are H, or two R^{19} are bound together to form an aromatic ring and the other R^{19} is H.

15. (Original) The compound according to claim 14, wherein one R^{19} is –O-(C1-C3)-alkyl-aryl.

16. (Currently amended)The compound according to claim 15, wherein one R^{19} is –O-benzyl.

17. (Original) The compound according to claim 14, wherein the two R^{19} that are bound together form a 6-membered aromatic ring.

18. (Original) The compound according to claim 17, wherein the two R^{19} that are bound together form phenyl.

19. (Original) The compound according to claim 1, wherein R^{18} is $–N(R^{11})-$.

20. (Original) The compound according to claim 19, wherein R^{18} is –N(H)- or –N(CH3)-.

21. (Currently amended)The compound according to claim 1, wherein A^2 is a bond or $-N(R^{11})-CH(M)-C(O)-$.

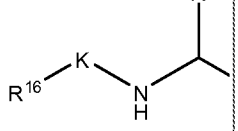
22. (Currently amended) The compound according to claim 21, wherein A^2 is a bond or -N(H)-CH(M)-C(O)-, wherein M is isopropyl.23. (Original) The compound according to claim 1, wherein V is $–NR^{11}-$.

24. (Original) The compound according to claim 23, wherein V is –NH-.

25. (Original) The compound according to claim 1, wherein K is –C(O)- or $–S(O)_2-$.

26. (Original) The compound according to claim 25, wherein K is –C(O)-.

27. (Currently amended) The compound according to claim 1, wherein T is selected from $-R^{12}$, -alkyl-R^{12}, -alkenyl-R^{12}, -alkynyl-R^{12}, $-OR^{12}$, $-N(R^{12})_2$, $-C(=NO\text{-alkyl})R^{12}$ or



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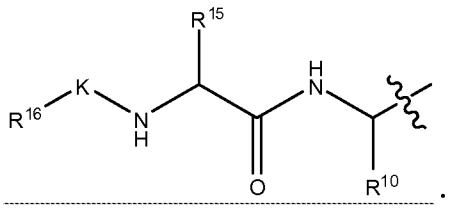

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28. (Original) The compound according to claim 27, wherein T is $-R^{12}$, or -alkyl-R^{12}.

29. (Original) The compound according to claim 1, wherein R^{12} is aryl or heteroaryl and is optionally substituted by 1-3 J groups.

30. (Original) The compound according to claim 29, wherein R^{12} is naphthyl, pyrazinyl, or pyridyl, any of which is optionally substituted with a hydroxy group.

31. (Original) The compound according to claim 1, wherein R^{10} is alkyl substituted with carboxy.

32. (Original) The compound according to claim 1, wherein R^{15} is alkyl substituted with carboxy.

33. (Original) The compound according to claim 1, wherein the ring to which R^{18} and R^{19} are attached is aromatic.

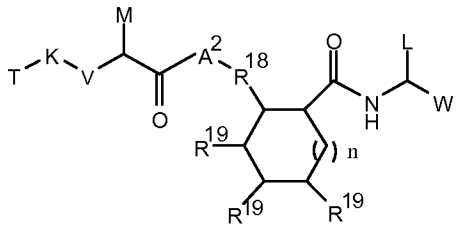
34. (Original) A pharmaceutically acceptable composition comprising:
    a) a compound according to any one of claims 1-33 in an amount effective to inhibit HCV NS3 protease; and
    b) a pharmaceutically suitable carrier.

35. (Withdrawn) The use of a compound according to any one of claims 1-33 or a pharmaceutical composition according to claim 34 in the manufacture of a medicament for inhibiting serine protease activity in a patient.

36. (Withdrawn) The use according to claim 35, wherein the serine protease is HCV NS3 protease.

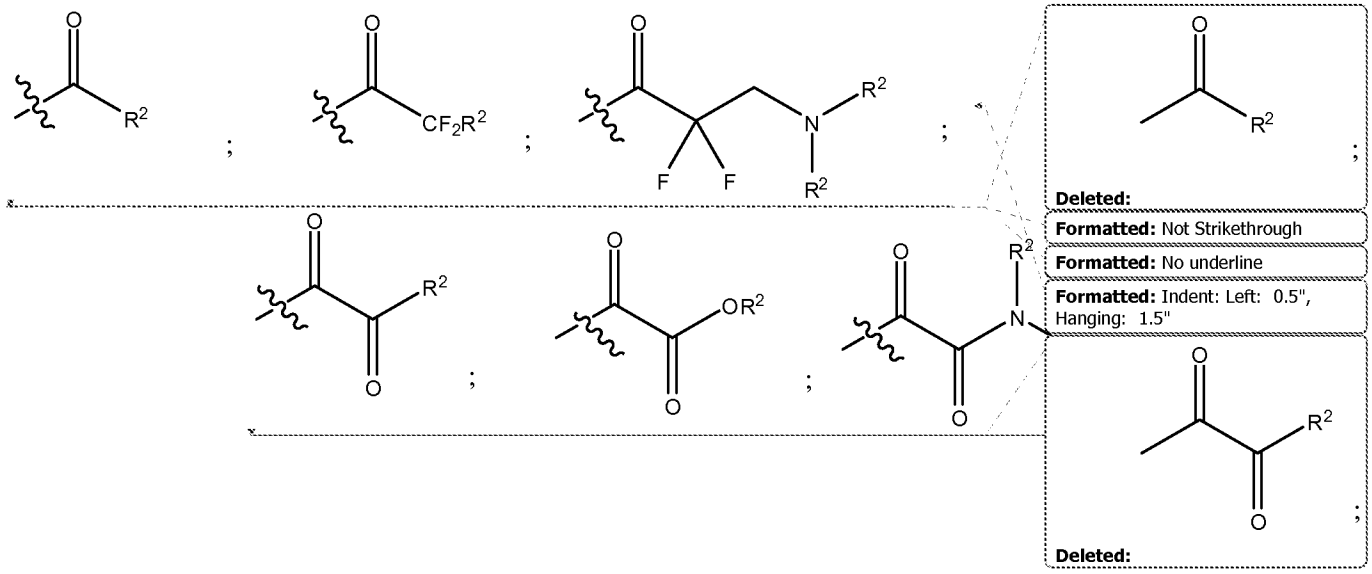
37. (Withdrawn) The use of a compound according to any one of claims 1-33 or a pharmaceutical composition according to claim 34 in the manufacture of a medicament for treating or preventing hepatitis C viral infection in a patient.

38. (Withdrawn - Currently amended) A process for preparing a compound of the formula (I):



wherein:

W is:



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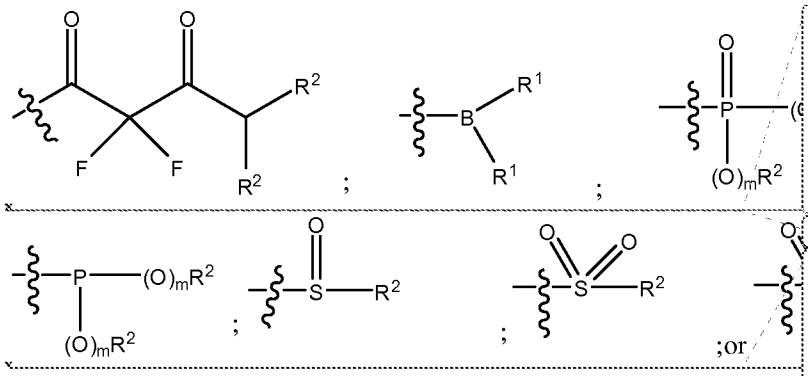

wherein:

m is 0 or 1;

each R^1 is hydroxy, alkoxy, or aryloxy, or each R^1 is an oxygen atom and together with the boron, to which they are each bound, form a 5-7 membered ring, wherein the ring atoms are carbon, nitrogen or oxygen;

each R^2 is independently hydrogen, fluorine, alkyl, alkenyl, aryl, aralkyl, aralkenyl, cycloalkyl, cycloalkylalkyl, cycloalkenyl, cycloalkenylalkyl, heteroaralkyl, heterocyclyl, heterocyclylalkyl, heterocyclylalkenyl, heteroaryl, or heteroaralkyl; or two R^2 groups, which are bound to the same nitrogen atom, form together with that nitrogen atom, a 5-7 membered monocyclic heterocyclic ring system; wherein any R^2 carbon atom is optionally substituted with J;

J is alkyl, aryl, aralkyl, alkoxy, aryloxy, aralkoxy, cycloalkyl, cycloalkoxy, heterocyclyl, heterocyclyloxy, heterocyclylalkyl, keto, hydroxy, amino, alkylamino, alkanoylamino, aroylamino, aralkanoylamino, carboxy, carboxyalkyl, carboxamidoalkyl, halo, heteroaryl, cyano, nitro, formyl, acyl, sulfonyl, or sulfonamido and is optionally substituted with 1-3 J^1 groups; and

J^1 is alkyl, aryl, aralkyl, alkoxy, aryloxy, heterocyclyl, heterocyclyloxy, keto, hydroxy, amino, alkanoylamino, aroylamino, carboxy, carboxyalkyl, carboxamidoalkyl, halo, cyano, nitro, formyl, sulfonyl, or sulfonamido;

L is alkyl, alkenyl, or alkynyl, wherein any hydrogen is optionally replaced with halogen, and wherein any hydrogen or halogen atom bound to any terminal carbon atom is optionally replaced with sulfhydryl or hydroxy;

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each M is independently alkyl, cycloalkyl, aryl, aralkyl, heterocyclyl, heterocyclylalkyl, cyclohexylmethyl, heteroaryl, or heteroaralkyl, and is optionally substituted by 1 to 3 J groups, wherein any alkyl carbon atom may be replaced by a heteroatom;

R^{18} is a bond, $-N(R^{11})-$ or $-C(O)-$;

R^{11} is hydrogen or C1-C3 alkyl;

each R^{19} is independently -H or $-R^{21}$-aryl, or 2 adjacent R^{19} may be bound to one another to form a 5-7 membered aromatic ring; wherein any R^{19} is optionally substituted with 1 to 4 independently selected [[J']] J groups;

each R^{21} is independently C1-C3-straight or branched alkyl, C2-C3-straight or branched alkenyl, O-(C1-C3)-straight or branched alkyl, or O-(C2-C3)-straight or branched alkenyl;

n is 0 or 1;

the ring to which R^{18} and R^{19} are attached may be saturated, partially saturated, aromatic or fully unsaturated; and 1 to 3 carbon atoms that make up the ring to which R^{18} and R^{19} are attached are optionally replaced with a heteroatom which is independently selected from O, S, S(O), $S(O)_2$, or $N(R^{11})$;

A^2 is a bond or $-N(R^{11})-R^{17}(M)-R^{22}-$, wherein

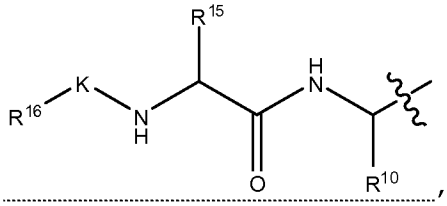
R^{17} is –CH or –N-; and

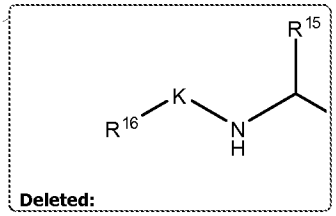
R^{22} is $-C(O)-$ or $-S(O)_2-$;

V is a bond, $-CH(R^{11})$, -O-, -S- or $-N(R^{11})-$;

K is a bond, -O-, -S-, -C(O)-, -S(O)-, $-S(O)_2$, or $-S(O)NR^{11}-$; and

T is $-R^{12}$, -alkyl-R^{12}, -alkenyl-R^{12}, -alkynyl-R^{12}, $-OR^{12}$, $-N(R^{12})_2$, $-C(O)R^{12}$, $-C(=NO\text{-alkyl})R^{12}$ or





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wherein:

each R^{12} is independently selected from hydrogen, aryl, heteroaryl, cycloalkyl, heterocyclyl, cycloalkylidenyl, or heterocycloalkylidenyl, and is optionally substituted with 1 to 3 J groups; or a first R^{12} and a second R^{12}, together with the nitrogen to which they are bound, form a mono- or bicyclic ring system optionally substituted with 1 to 3 J groups;

R^{10} is alkyl, cycloalkyl, aryl, aralkyl, heterocyclyl, heterocyclylalkyl, heteroaryl, heteroaralkyl, carboxyalkyl, or carboxaminoalkyl, and is optionally substituted with 1 to 3 J groups;

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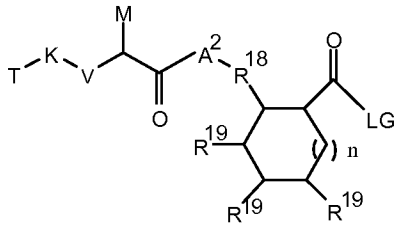
R^{15} is alkyl, cycloalkyl, aryl, aralkyl, heterocyclyl, heterocyclylalkyl, heteroaryl, heteroaralkyl, carboxyalkyl, or carboxaminoalkyl, and is optionally substituted with 1 to 3 J groups; and

R^{16} is hydrogen, alkyl, aryl, heteroaryl, cycloalkyl, or heterocyclyl;

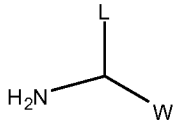
comprising the step of:

reacting a compound of formula (II):



, wherein LG is OH or an appropriate leaving group and the other substituents are as defined above;

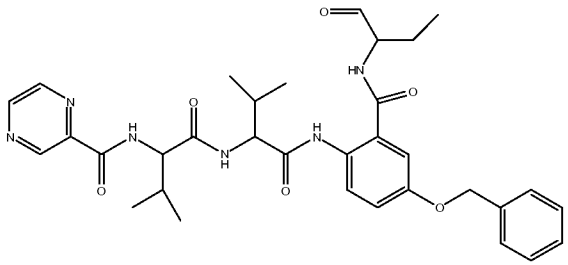
with a compound of formula (III):

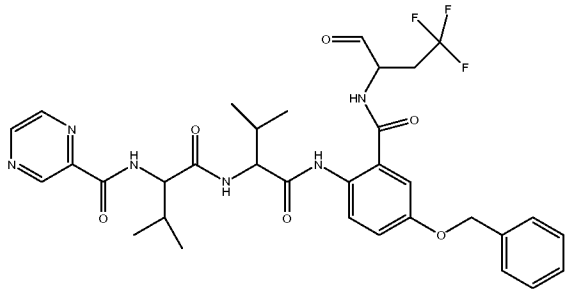


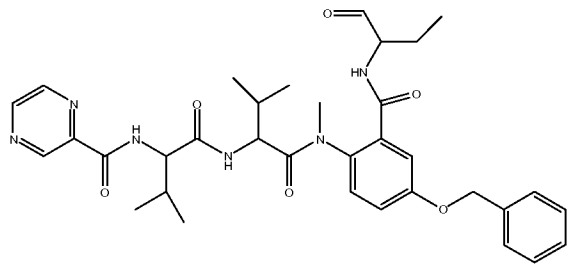
, wherein the NH_2 group is optionally protected and the variables are as defined above;

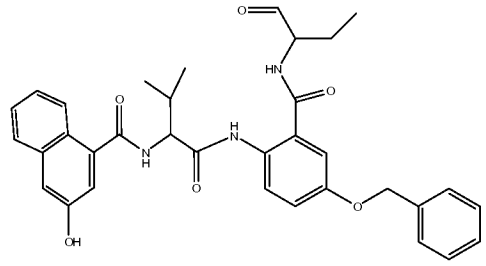
in the presence of a coupling reagent, provided that the compound of formula (II) or the compound of formula (III) is optionally bound to a resin.

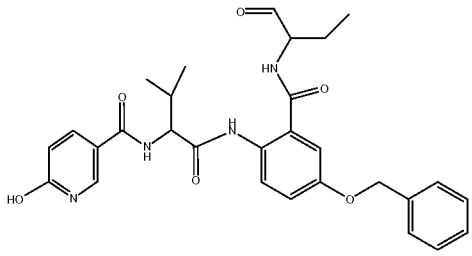
39. (New) A compound represented by a structural formula selected from:

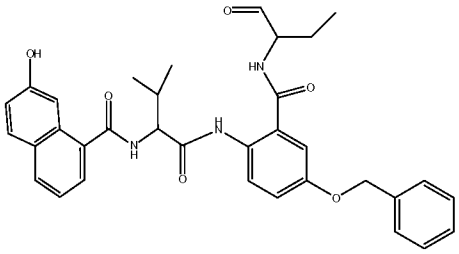


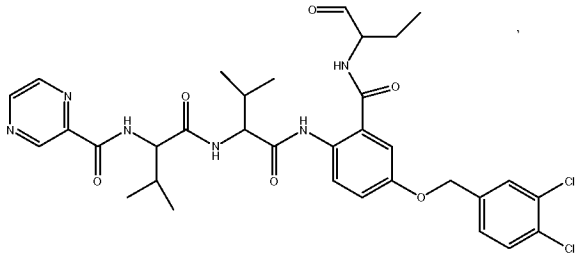


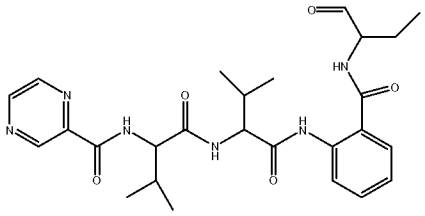


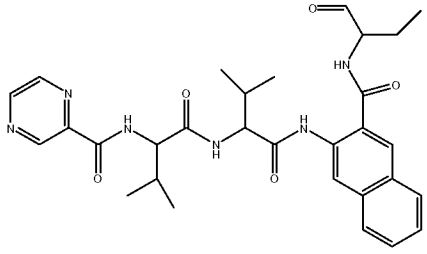












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